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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/825,654

04/16/2004

K.R. Kishore

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EXAMINER

MAHMOUDZADEH, NIMA

ART UNIT

PAPER NUMBER

2619

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/825,654	Applicant(s) KISHORE ET AL.	
	Examiner NIMA MAHMOUDZADEH	Art Unit 2619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04/16/2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on November 18, 2007 has been entered. Claims 1-30 are still pending in this application, with claims 1, 11, 21, 24, 27, and 29 being independent.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Galand et al. (US Patent No. 6,424,624)

Regarding claim 1, Galand et al. teach a method of managing flow of datagram traffic, the method comprising:

providing a first networked device that is operably connected to a second networked device (Column 4, lines 22-25);

transferring datagrams from a first port of the first device to a first port of the second device using a pathway that is operably connected to a second port of the first

device and a second port of the second device (In column 6, lines 26-39 and Fig. 2, referring to connection between two devices through a communication network wherein, 23 and 24 are defined as node/port. In column 7, lines 19-38 and Fig. 3, further explain that each node/port include at least an adapter wherein it includes a receive port section (302), a transmit port section (303) and processing unit (304) that are connected to a network link/trunk. These trunks are pathways between two nodes); and

selectively pausing an individual port on the first device that is causing over-subscription of the first port of the second device (In column 8, lines 2-16 due to congestion on one port, the traffic is stopped in that selected port by detecting binary "1" in EFCI. Also, see column 5, lines 24-28 which disclose assignment of higher priority to real-time data when congestion occurs).

Regarding claim 2, Galand et al. teach the method of claim 1, further comprising re-activating a paused port by transmitting a re-activation signal to the paused port (Column 8, lines 12-16).

Regarding claim 3, Galand et al. teach the method of claim 1, further comprising re-activating a paused port pursuant to the detection of a condition wherein the first port of the second device has datagram traffic flowing therethrough in an amount that is below a lower trigger value (Column 7, lines 13-18).

Regarding claim 4, Galand et al. teach the method of claim 1, further comprising re-activating a paused port pursuant to the passage of a pre-determined time increment (Column 11, lines 28-31).

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Regarding claim 5, Galand et al. teach the method of claim 1, wherein the selectively pausing comprises using in-band control frames to pause the individual port (Column 6, lines 54-67).

Regarding claim 6, Galand et al. teach the method of claim 1, wherein the selectively pausing comprises using separate pathways between the first and second networked devices to transmit datagrams and control frames (Column 7, lines 39-43).

Regarding claim 7, Galand et al. teach the method of claim 1, wherein the selectively pausing comprises using a non-memory-consuming communication to pause the individual port (Column 3, lines 40-58).

Regarding claim 8, Galand et al. teach the method of claim 1, wherein the selectively pausing comprises referencing a listing of ports that are over-subscribed (Column 3, lines 50-58).

Regarding claim 9, Galand et al. teach the method of claim 8, wherein the selectively pausing comprises periodically updating the listing of ports that are over-subscribed (Ports information and congestion info is saved and updated within predetermined time. Column 3, lines 50-58).

Regarding claim 10, Galand et al. teach the method of claim 1, wherein the selectively pausing comprises selectively pausing individual ports on devices other than the first and second device (Column 4, lines 22-25 and column 6, lines 26-39).

Regarding claim 11, Galand et al. teach a method of managing flow of datagram traffic, the method comprising:

providing a first networked device that is operably connected to a second networked device (Column 4, lines 22-25);

transferring datagrams from a first port of the first device to a first port of the second device using a pathway that is operably connected to a second port of the first device and a second port of the second device (In column 6, lines 26-39 and Fig. 2, referring to connection between two devices through a communication network wherein, 23 and 24 are defined as node/port. In column 7, lines 19-38 and Fig. 3, further explain that each node/port include at least an adapter wherein it includes a receive port section (302), a transmit port section (303) and processing unit (304) that are connected to a network link/trunk. These trunks are pathways between two nodes); and

signaling the first port of the first device to send fewer datagrams to the first port of the second device when an over-subscription is detected at the first port of the second device (In column 8, lines 2-16 due to congestion on one port, the traffic is stopped in that selected port by detecting binary "1" in EFCI. Also, see column 5, lines 24-28 which disclose assignment of higher priority to real-time data when congestion occurs).

Regarding claim 12, Galand et al. teach the method of claim 11, wherein the signaling comprises signaling the first port of the first device to send datagrams in

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proportion to a total number of datagrams attempting to reach the first port of the second device (Column 8, lines 2-16).

Regarding claim 13, Galand et al. teach the method of claim 11, wherein the signaling is performed using a non-memory-consuming communication to signal the first port of the first device (Column 3, lines 40-58).

Regarding claim 14, Galand et al. teach the method of claim 11, wherein the signaling comprises broadcasting a signal that alerts ports on the network that the first port of the second device is over-subscribed (Column 8, lines 2-11).

Regarding claim 15, Galand et al. teach the method of claim 11, wherein the transferring comprises referencing a listing of ports on the network that are over-subscribed before transferring a datagram between the first port of the first device to the first port of the second device (Column 14, lines 31-65).

Regarding claim 16, Galand et al. teach the method of claim 11, further comprising:

resuming unrestricted datagram transmission to the first port of the second device by broadcasting a signal (Column 4, lines 62-65).

Regarding claim 17, Galand et al. teach the method of claim 11, further comprising:

resuming unrestricted datagram transmission to the first port of the second device when a total number of datagrams attempting to reach the first port of the second device falls below a lower trigger value (Column 13, lines 1-7).

Regarding claim 18, Galand et al. teach the method of claim 11, further comprising:

resuming unrestricted datagram transmission to the first port of the second device after passage of a pre-determined time increment (Column 11, lines 28-35).

Regarding claim 19, Galand et al. teach the method of claim 11, wherein the signaling comprises using in-band control frames (Column 6, lines 54-59).

Regarding claim 20, Galand et al. teach the method of claim 11, wherein the signaling comprises using a separate link to transmit control frames (Fig. 2, lower link from port 23 to port 24).

Regarding claim 21, Galand et al. teach a communications system comprising:

a first data distribution means operably connected to a second data distribution means (Column 4, lines 22-25);

a first communications means for transferring datagrams from a first port of the first data distribution means to a first port of the second data distribution means (Column 6, lines 26-39); and

control means for selectively pausing individual ports that are causing over-subscription of the first port of the second data distribution means (Column 8, lines 2-16).

Regarding claim 22, Galand et al. teach the system of claim 21, further comprising a second communications means between the first data distribution means and the second data distribution means wherein the second communications means is non-lossy (Column 9, lines 30-39).

Regarding claim 23, Galand et al. teach the system of claim 21, further comprising storage means for storing information concerning which ports in the network are over-subscribed (Column 4, lines 62-65).

Regarding claim 24, Galand et al. teach a communications system comprising:

a first data distribution means operably connected to a second data distribution means for distributing datagrams over a network (Column 4, lines 22-25);

communications means for transferring the datagrams from a first port of the first data distribution means to a first port of the second data distribution means (Column 6, lines 26-39); and

control means for signaling the first port of the first data distribution means to send fewer datagrams to the first port of the second data distribution means when an over-subscription is detected at the first port of the second data distribution means (Column 8, lines 12-16).

Regarding claim 25, Galand et al. teach the system of claim 24, further comprising:

a second communications means for allowing communication between the first data distribution means and the second data distribution means, wherein the second communications means is non-lossy (Column 9, lines 30-39).

Regarding claim 26, Galand et al. teach the system of claim 24, further comprising:

storage means for storing information concerning which ports in the network are over-subscribed (Column 4, lines 62-65).

Regarding claim 27, Galand et al. teach a communications system comprising:

a first device operably connected to a second device (Column 4, lines 22-25);

a first controller configured to transfer datagrams from a first port of the first device to a first port of the second device (Column 6, lines 26-39); and

a second controller configured to selectively pause individual ports in the first device that are contributing to over-subscription of the first port of the second device (Column 8, lines 12-16).

Regarding claim 28, Galand et al. teach the system of claim 27, further comprising:

a storage unit configured to store information concerning which ports in the second device are over-subscribed (Column 4, lines 62-65).

Regarding claim 29, Galand et al. teach a communications system comprising:

a first device operably connected to a second device (Column 4, lines 22-25);

a first controller configured to transfer datagrams from a first port of the first device to a first port of the second device (Column 6, lines 26-39); and

a second controller configured to signal the first port of the first device to send fewer datagrams to the second port of the second device when an over-subscription is detected at the second port of the second device (Column 8, lines 12-16).

Regarding claim 30, Galand et al. teach the system of claim 29, further comprising a storage unit configured to store information concerning which ports in the network are over-subscribed (Column 4, lines 62-65).

Response to Arguments

4. Applicant's arguments with regards to claims 1 and 11 filed on November 18, 2007 have been fully considered but they are not persuasive.

On page 11 of the Applicant's response, Applicant argued that Galand et al. does not disclose "transferring datagram from first port of the first device to a first port of the second device using a pathway that is operably connected to a second port of the first device and a second port of the second device," of claims 1 and 11. The Examiner

respectfully disagrees. As disclosed on column 6, lines 26-39 and Fig. 2 of Galand et al., pathway (Trunk) is the connection between two devices (23 and 24) through a communication network wherein, 23 and 24 are defined as node/port. In column 7, lines 19-38 and Fig. 3, further explain that each node/port includes at least an adapter wherein it includes a receive port section (302), a transmit port section (303) and processing unit (304) that are connected to a network link/trunk. These trunks are pathways between two nodes (23 and 24).

On page 12 of the Applicant's response, Applicant argued that Galand et al. does not disclose "selectively pausing an individual port on the first device that is causing over-subscription of the first port of the second device," of claims 1 and 11. The examiner respectfully disagrees. As disclosed on column 8, lines 2-16, due to congestion on one port, the traffic is stopped in that selected port by detecting binary "1" in EFCI. Also, see column 5, lines 24-32 which disclose assignment of higher priority to real-time data when congestion occurs and the fact in case of congestion occurring, non-reserved packets are going to be discarded before the reserved one are discarded which means if congestion is that bad both non-reserved and reserved packets are going to be discarded. In other words, the port is not going to be active at that point until the congestion is resolved.

In regards to claims 2-10, and 12-30, Applicant argued the reference fails to teach the claimed invention based on the reasons as stated in the arguments of claims 1 and 11, Examiner respectfully disagree with the same reasons as discussed above.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Erimli et al. (US Patent No. 6,405,258) teach method and apparatus for controlling the flow of data frames through a network switch on a port-by-port basis

7. Any responses to this Office Action should be **faxed** to (571) 273-8300 or **mailed** to:

Commissioner for Patent
P.O. Box 1450

Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIMA MAHMOUDZADEH whose telephone number is (571)270-3527. The examiner can normally be reached on Monday - Friday, 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

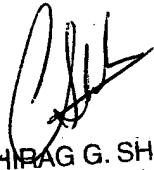
Nima Mahmoudzadeh

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A handwritten signature in black ink, appearing to read 'Chirag G. Shah', is positioned above the printed name.

CHIRAG G. SHAH
PRIMARY PATENT EXAMINER